

**REMARKS**

Claim 3 has been rewritten in independent form and is otherwise the same as the originally filed claim 3.

As to new claims 27-38, Applicants note the present patent application is a divisional of parent patent application having Serial No. 09/438,037, filed on November 10, 1999, and issued as United States Patent 6,774,474 on August 10, 2004. Since the new method claims 27-38 include all of the limitations of allowed product claims 1-12, respectively, of said parent application, Applicants maintain that new claims 27-38 should be allowed in light of Gazette Notice: Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer*, and 35 U.S.C. § 103(b) (Feb. 28, 1996)", which indicates that the Examiner should rejoin the withdrawn process claims that include all of the limitations of allowed product claims. Applicants further maintain that preceding rule in said Gazette Notice is also stated in MPEP 821.04: "... if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined." Accordingly, Applicants respectfully request that the Examiner indicate that claims 27-38 are allowed in the present divisional patent application, based on the corresponding product claims in United States Patent 6,774,474.

The Examiner rejected claims 1-13 under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with written description requirement.

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The Examiner rejected claims 1, 2, 4-6 and 9-13 under 35 U.S.C. §103(a) as allegedly being unpatentable over Ouchi et al. (U.S. 6,251,704) in combination with Shirai et al. (U.S. 5,517,756).

The Examiner rejected claims 7 and 8 under 35 U.S.C. §103(a) as allegedly being unpatentable over Ouchi et al. (U.S. 6,251,704) in combination with Shirai et al. (U.S. 5,517,756) and further in combination with Arnezzani et al. (U.S. 5,818,697).

Applicants respectfully traverse the §112 and §103 rejections with the following arguments.

**35 U.S.C. §112, First Paragraph**

The Examiner rejected claims 1-13 under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with written description requirement.

Since claims 1, 5-6, 11, and 13 have been canceled, the rejection of claims 1, 5-6, 11, and 13 under 35 U.S.C. §112, first paragraph is moot.

As to the rejection of claims 2-4, 7-10, and 12 under 35 U.S.C. §112, first paragraph, the Examiner argues: "There is no support in the writes description, such that pads are not covered by a mask in the direction of the first dimension of an opening. A dimension is defined as a measure of spatial extent, such as width, height and length, as shown in applicant's Figures 5; the openings in the direction of either the width, height or length do in fact cover the pad. Furthermore, applicant in its specification (page 7) indicates "openings... covering the conductive pads.""

In response, Applicants respectfully contend that FIG. 5 shows that non-circular opening 30 is directly above the conductive pad 44 such that the major axis 32 of the opening 30 totally encompasses the extent of the pad 44 in the first direction (i.e., the direction defined by the major axis 32). Since the opening 30 does not include the material of the mask, it follows that the pads are not covered by the mask where the opening 30 exists.

Moreover, the Examiner's argument has misconstrued text on page 7 of the specification. In particular, page 7, lines 19-21 of the specification recites: "As illustrated in Fig. 5, the elongated openings 30 within the masks 26, 28 covering the conductive pads 16, 22, respectively, have a major axis 32 and a minor axis 34". Applicants maintain that in the preceding text on page 7, lines 19-21 of the specification, the word "covering" does not modify "openings" as

alleged by the Examiner, but rather modifies the phrase: "the masks 26, 28". Applicants draw further support from page 8, lines 9-11 of the specification which recites: "Specifically, the solder balls 47 wet to the **regions of the conductive pads 16 that are not covered by the masks 2**" (emphasis added).

Based on the preceding arguments, Applicants respectfully contend that claims 2-4, 7-10, and 12 comply with written description requirement under 35 U.S.C. § 112, first paragraph.

**35 U.S.C. §103(a)**

The Examiner rejected claims 1, 2, 4-6 and 9-13 under 35 U.S.C. §103(a) as allegedly being unpatentable over Ouchi et al. (U.S. 6,251,704) in combination with Shirai et al. (U.S. 5,517,756). In addition, the Examiner rejected claims 7 and 8 under 35 U.S.C. §103(a) as allegedly being unpatentable over Ouchi et al. (U.S. 6,251,704) in combination with Shirai et al. (U.S. 5,517,756) as applied to claim 1 and further in combination with Arnezzani et al. (U.S. 5,818,697)..

Since claims 1, 5-6, 11, and 13 have been canceled, the rejection of claims 1, 5-6, 11, and 13 under 35 U.S.C. §103(a) is moot.

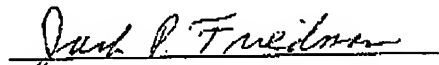
Since claims 2, 4, 9-10, and 12 depend from claim 3, which has not been rejected over Ouchi in combination with Shirai under 35 U.S.C. §103(a), Applicants maintain that claims 2, 4, 9-10, and 12 are not unpatentable over Ouchi in combination with Shirai under 35 U.S.C. §103(a).

Since claims 7-8 depend from claim 3, which has not been rejected over Ouchi in combination with Shirai under 35 U.S.C. §103(a), Applicants contend that claims 7-8 are not unpatentable over Ouchi in combination with Shirai and further in combination with Arnezzani.

**CONCLUSION**

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account No. 09-0457.

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